D/N ATR 700TVL IR CAMERA
CMR7082/7084/7088 N/P 3.6/6

D/N ATR 700TVL VARI-FOCAL IR CAMERA
CMR7082X3.6 N/P

INSTRUCTION MANUAL

IMPORTANT SAFEGUARDS

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION :
TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK)
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL.

GRAPHIC SYMBOL EXPLANATION

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the unit.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS

CAUTION

⊗ **Do not drop or strike this equipment.**
Sensitive electronics inside are vulnerable to excessive shock.

⊗ **Do not install the equipment near any naked flames or heat sources.**
Excessive heat could damage this unit.

⊗ **Do not expose this unit to rain or excessive moisture, avoid smoke and dust.**
Please the camera in an environmental housing for protection. If the camera gets wet, unplug it and have it checked by qualified service personnel.

⊗ **Do not cover cloth or to install this unit in poorly ventilated places.**
This may lead to overheating.

⊗ **Do not continue to operate if there appears to be fault.**
If the unit ceases to function, contact qualified service personnel for help.

⊗ **Do not touch the power connection with wet hands.**
Risk of short circuit or electric shock.

⊗ **Do not damage the power cord or leave it under pressure.**
Risk of fire or shock circuit.

CONGRATULATIONS

Thank you for purchasing this D/N ATR 700TVL (Vari-Focal)IR Camera. You now own one of the many fine CCTV products we manufactured. This product has been carefully inspected under rigid quality control and should reach you in perfect condition. With reasonable care, it will provide years of reliable performance.

We recommend that you read this installation and operation manual thoroughly before installing and operation your new system.

Here you will find all the information you need to set up and use the system. If any questions are not answered in the manual, please contact your dealer.
Before proceeding, please read and observe all instructions and warnings contained in this manual. Retain this manual with the original bill of sale for future reference and, if necessary, warranty service.

When unpacking your new camera, check for missing or damaged items. If any item is missing, or if damage is evident, **DO NOT INSTALL OR OPERATE THIS PRODUCT**. Contact your dealer for assistance.

WARRANTY INFORMATION

Please complete the following product purchase information. The factory will requests this information when contacted for technical support, or warranty repair. It is also valuable in case of loss or theft.

Purchase Date : _____
Serial Number : _____
Model Number : _____

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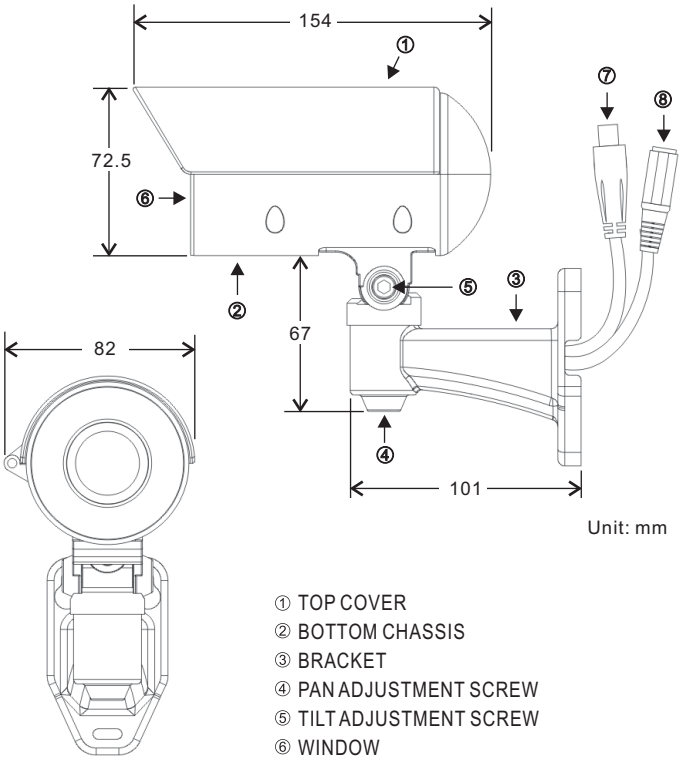
PART DESCRIPTION & DIMENSION



Unit: mm

① TOP COVER
② BOTTOM CHASSIS
③ BRACKET
④ PAN ADJUSTMENT SCREW
⑤ TILT ADJUSTMENT SCREW
⑥ WINDOW
⑦ VIDEO OUTPUT JACK (CMR7082)
⑧ DC POWER INPUT JACK (DC12V 10%, CMR7082)

INSTALLATION

1. CMR7082

1-1. Take out the camera from the inner box first. Plug the video cable and power cable to video output jack and DC power input jack of the camera (FIG.1). Then fix bracket to the wall(FIG.2).

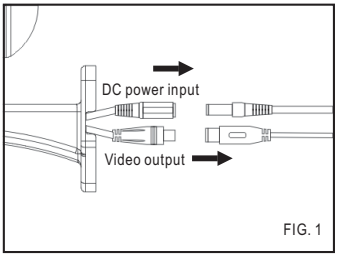


FIG. 1

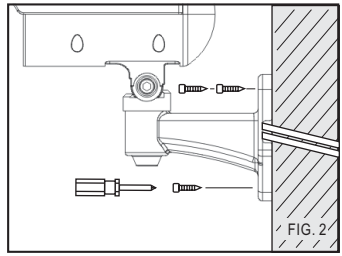


FIG. 2

1-2. Loosen the screws of top cover with screw driver(FIG.3).

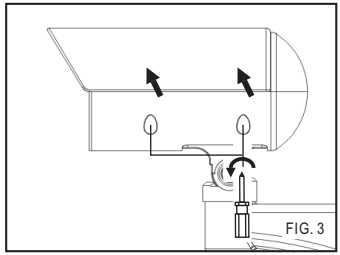


FIG. 3

2. CMR7084/8

2-1. Take out the camera from the inner box first. Loosen the pan adjustment screw with hexagon screw driver. Then, separated the bracket from the camera body(FIG.4). Put the power cable and video cable through the bracket and then fix it to the wall(FIG.5&FIG.6).

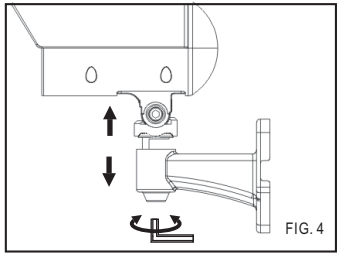


FIG. 4

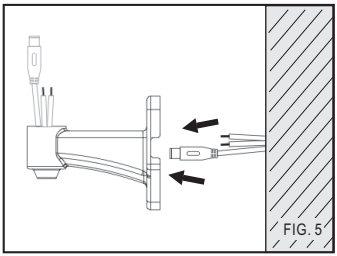


FIG. 5

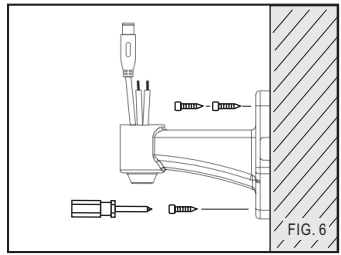


FIG. 6

2-2. Open the top cover with screw driver(FIG.7).

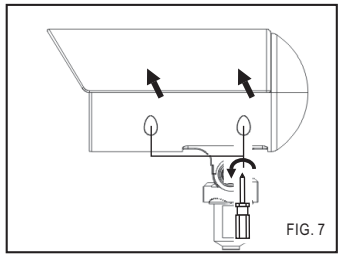


FIG. 7

2-3. Next, Put the power cable and video cable through the bottom chassis and rubble(FIG.8) and then fix the camera body on the bracket(FIG.9).

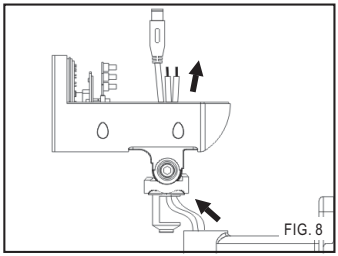


FIG. 8

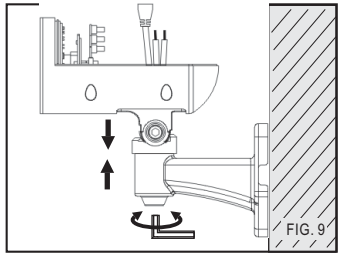


FIG. 9

2-4. Plug and fix the power cable to the terminal and plug the video cable to video output of the camera(FIG.10). For the safety reason, when plug video cable to video output please use the cable tubing to cover the bare part to avoid danger of electric shock or electric leakage(FIG.10&FIG.11).

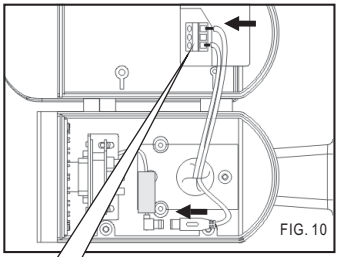


FIG. 10

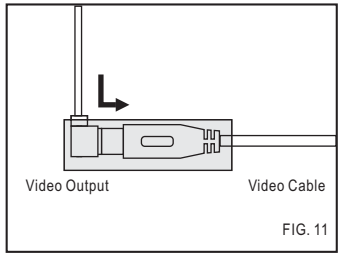
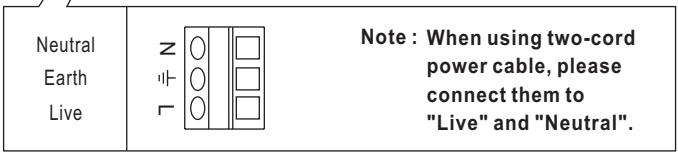
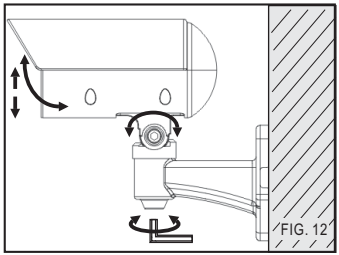


FIG. 11

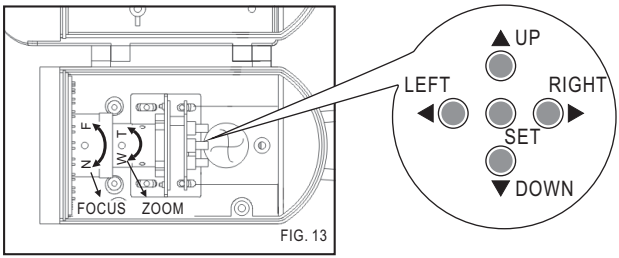


Note : When using two-cord power cable, please connect them to "Live" and "Neutral".

3. Loosen the pan and tilt adjustment screw on the bracket to turn the camera body to the desired angle and then tighten the screws(FIG.12).



4. First, adjust the lens on focus and zoom to form the optimal video image after that tighten the screws(FIG.13). Then adjust the OSD menu to form the optimal image. Please refer to page7~10.



4-1. USER OSD SETTING

Setting switches and Functions.

A. ▲(UP) : Press to move the cursor upwards or to select items.

B. ◀(LEFT) : Press to move the cursor to the left and to select or adjust the parameters of the selected item. The parameters changes each time this button is pressed.

C. ▶ (RIGHT) : Press to move the cursor to the right and select or adjust the parameters of the selected item. The parameters changes each time this button is pressed.

D. ▼ (DOWN) : Press to move the cursor downwards or to select items.

E. SET : Executes selections and displays a submenu for an item with the ↵ mark.

5. Replace the top cover and tighten the screws(FIG.14&FIG.15).

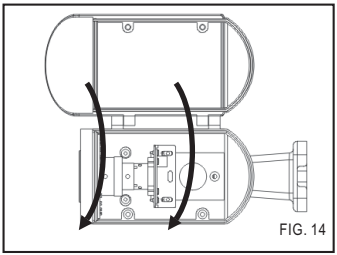


FIG. 14

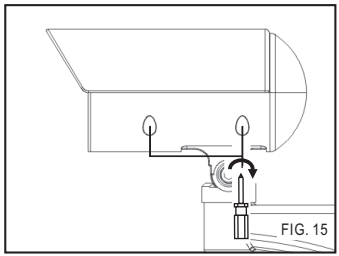
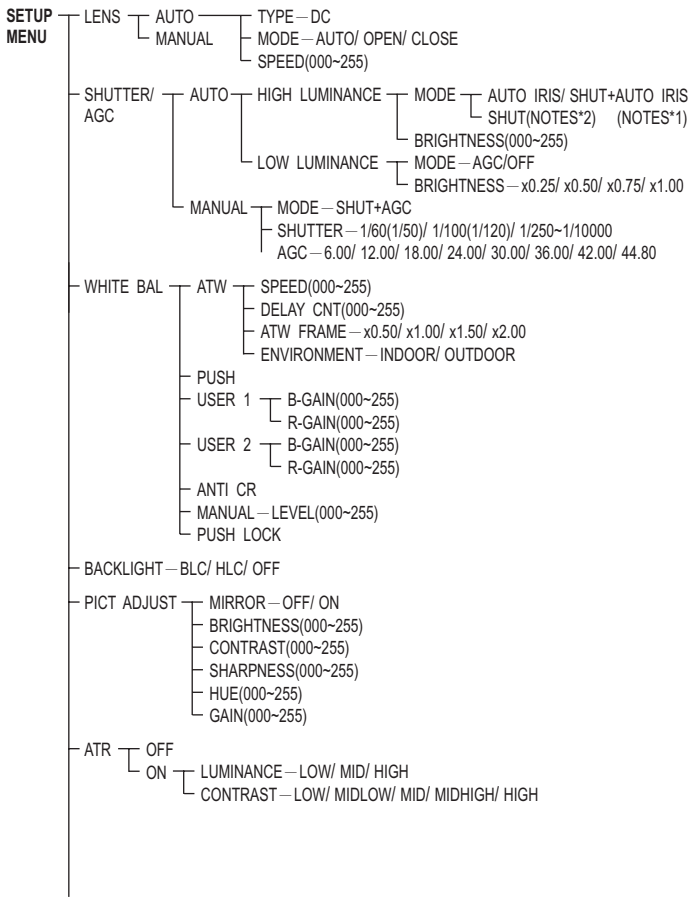
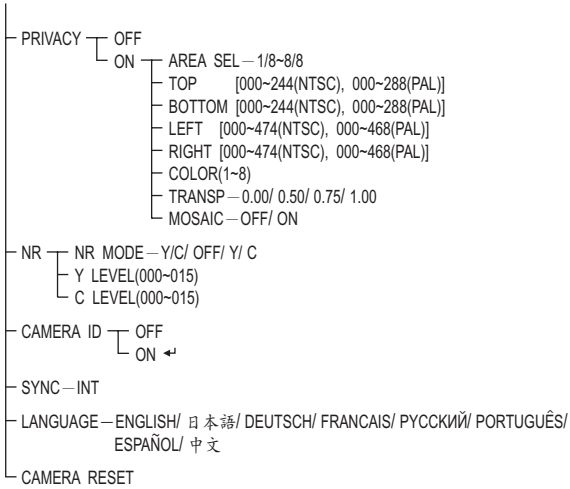


FIG. 15

CONFIGURATION OF THE MENU





NOTES

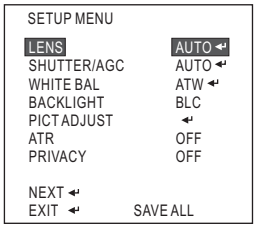
*1: The LENS option appear on the SETUP MENU menu, and then set the LENS mode to AUTO on the SETUP MENU menu.

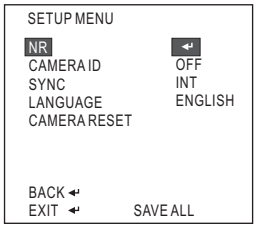
*2: The LENS option disappear on the SETUP MENU menu or set the LENS mode to MANUAL on the SETUP MENU menu.

SETTING MENU AND FUNCTION

TO Open and Exit the Menu screen

1. Press "SET" button.
   The Menu screen appears on the monitor. Check the current settings on the menu.
2. Push ▲ or ▼ button to select the options then use ◄ or ► button to select a mode.
   - NEXT: To the next setup menu.
   - BACK: Return to the previous.
   - RETURN: Return to the previous.
   - SAVE ALL: Used to save the various setting of the internal OSD menu in the EEPROM together.
   - EXIT: Exit the setup menu.





Setting of shutter speed of AUTO IRIS mode

Please set-up proper shutter speed for AUTO IRIS mode as below:
SHUTTER/AGC: AUTO[SETUP MENU]→ SET→ MODE: AUTO IRIS[AUTO SETUP]→ RETURN→ SHUTTER/AGC: MANUAL[SETUP MENU]→ SET→ SHUTTER:1/60(1/50) or 1/100(1/120) or 1/250.....[MANUAL SETUP]→ RETURN→ SHUTTER/AGC: AUTO[SETUP MENU]→ SAVE ALL → SET → EXIT

NOTES

1. Without LENS option in the CMR7082/7084/7088N/P3.6/6.
2. Only DC mode on the TYPE option. Because a DC auto iris lens is used with the CMR7082X3.6N/P.
3. Please select AUTO mode on the SHUTTER/AGC option. If you select MANUAL mode, the over exposure may occur.

SPECIFICATIONS

D/N ATR 700TVL IR CAMERA								
Model No.			CMR7082N/P3.6	CMR7082N/P6	CMR7084N/P3.6	CMR7084N/P6	CMR7088N/P3.6	CMR7088N/P6
Lens	Focal Length		3.6mm	6mm	3.6mm	6mm	3.6mm	6mm
	Iris		F2.0	F1.8	F2.0	F1.8	F2.0	F1.8
	Angle of view	H	73	44.5	73	44.5	73	44.5
		V	54.5	33.1	54.5	33.1	54.5	33.1
		D	92	56	92	56	92	56
Power Input Voltage			DC12V (10%)		AC24V (10%)		AC100~240V	
System			NTSC or PAL					
Pick Up Element			1/3" Exview HAD CCD Sensor					
Effective Pixels			976(H) x 494(V) [NTSC] 976(H) x 582(V) [PAL]					
Chip Size			5.58mm(H) x 4.67mm(V)					
Horizontal & Vertical Sync. Frequency			15.734 KHz / 59.94Hz [NTSC] 15.625 KHz / 50Hz [PAL]					
Scanning System			2:1 Interlace					
Menu Control			OSD Control					
Sync. Mode			Internal					
Resolution			Color: 700TV Lines, Mono: 750TV Lines					
Minimum Illumination			0.2Lux/F1.8, 0Lux(IR On)					
S/N Ratio			More Then 50dB (AGC-OFF)					
Auto Gain Control			AUTO / MANUAL					
White Balance			ATW / PUSH / USER1 / USER2 / ANTI CR / MANUAL / PUSH LOCK					
Shutter	Auto		1/60(1/50)S ~ 1/100,000S					
	Manual		1/60(1/50)S, 1/100(1/120)S, 1/250S, 1/500S, 1/1,000S, 1/2,000S, 1/4,000S, 1/10,000S					
Adaptive Tone Reproduction	Luminance		LOW / MID / HIGH					
	Contrast		LOW / MIDLOW / MID / MIDHIGH / HIGH					
Back Light Compensation			BLC / HLC(High Light Compensation) / OFF					
Noise Reduction			Y / C / Y/C / OFF					
Picture Adjust			MIRROR / BRIGHTNESS / CONTRAST / SHARPNESS / HUE / GAIN					
Privacy Masking			ON / OFF					
Privacy Masking Zone			8 Zones					
OSD Language			ENGLISH/JAPANESE/GERMANS/FRENCH/RUSSIAN/PORTUGUESE/SPANISH/SIMPLY CHINESE					
Video Output			CVBS 1.0Vp-p, 75ohm					
Gamma Characteristic			γ =0.45					
Power Consumption			7.8W		11W			
Operating Temperature			-10℃ ~ +50℃ (14℉ ~ 122℉)					
IP Rating			IP66					
Window			ϕ 65 Heat Resistant Glass					
Infrared LED	Peak Wavelength		850nm					
	Beam Spread		30					
	Radiant Distance		30M					
Dimension			Body:82mm(W) x 72.5mm(H) x 154mm(D), Bracket: 101mm(L)					
Weight			530g		540g			

Design and specifications are subject to change without notice.

D/N ATR 700TVL VARI-FOCAL IR CAMERA			
Model No.			CMR7082X3.6N/P
Lens	Focal Length		3.3 ~ 12mm
	Iris		F1.4
	Angle of view	H	89.8 ~ 23.9
		V	63.6 ~ 17.9
		D	125.7 ~ 29.9
Power Input Voltage			DC12V (10%)
System			NTSC or PAL
Pick Up Element			1/3" Exview HAD CCD Sensor
Effective Pixels			976(H) x 494(V) [NTSC] 976(H) x 582(V) [PAL]
Chip Size			5.58mm(H) x 4.67mm(V)
Horizontal & Vertical Sync. Frequency			15.734 KHz / 59.94Hz [NTSC] 15.625 KHz / 50Hz [PAL]
Scanning System			2:1 Interlace
Menu Control			OSD Control
Sync. Mode			Internal
Infrared Cut Filter			Auto Selectable, Automatic Switch From Color Mode to Monochrome
Resolution			Color: 700TV Lines, Mono: 750TV Lines
Minimum Illumination		Color	0.045Lux / F1.4
		Mono	0.009Lux / F1.4
		IR On	0Lux
S/N Ratio			More Then 50dB (AGC-OFF)
Auto Gain Control			AUTO / MANUAL
White Balance			ATW / PUSH / USER1 / USER2 / ANTI CR / MANUAL / PUSH LOCK
Shutter	Auto		1/60(1/50)S ~ 1/100,000S
	Manual		1/60(1/50)S, 1/100(1/120)S, 1/250S, 1/500S, 1/1,000S, 1/2,000S, 1/4,000S, 1/10,000S
Adaptive Tone Reproduction	Luminance		LOW / MID / HIGH
	Contrast		LOW / MIDLOW / MID / MIDHIGH / HIGH
Back Light Compensation			BLC / HLC(High Light Compensation) / OFF
Noise Reduction			Y / C / Y/C / OFF
Picture Adjust			MIRROR / BRIGHTNESS / CONTRAST / SHARPNESS / HUE / GAIN
Privacy Masking			ON / OFF
Privacy Masking Zone			8 Zones
OSD Language			ENGLISH/JAPANESE/GERMANS/FRENCH/RUSSIAN/PORTUGUESE/SPANISH/SIMPLY CHINESE
Video Output			CVBS 1.0Vp-p, 75ohm
Gamma Characteristic			γ =0.45
Power Consumption			6.8W
Operating Temperature			-10℃ ~ +50℃ (14℉ ~ 122℉)
IP Rating			IP66
Window			ϕ 65 Heat Resistant Glass
Infrared LED	Peak Wavelength		850nm
	Beam Spread		30
	Radiant Distance		30M
Dimension			Body:82mm(W) x 72.5mm(H) x 154mm(D), Bracket: 101mm(L)
Weight			550g

Design and specifications are subject to change without notice.

MERIT LILIN ENT. CO., LTD
http://www.meritlilin.com

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